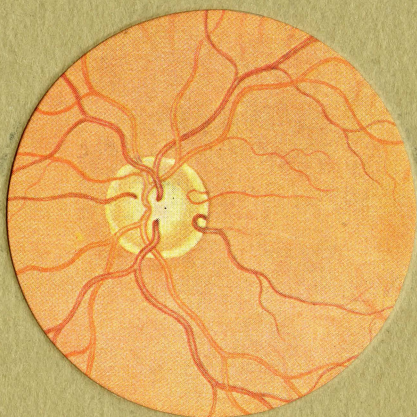
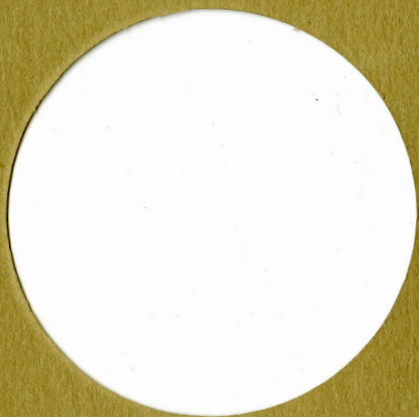
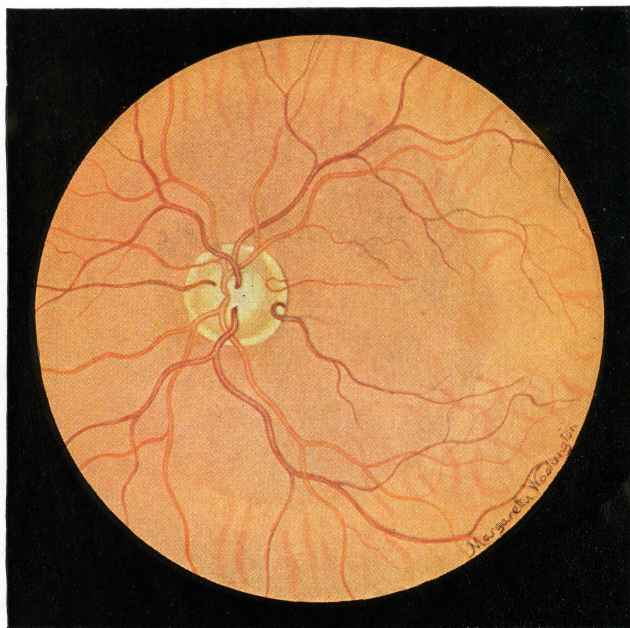


A Few Important  
**O**PTHALMIC  
REMINDERS  
FOR THE  
BUSY PRACTITIONER





A Few Important  
Ophthalmic  
Reminders  
*for the*  
Busy Practitioner

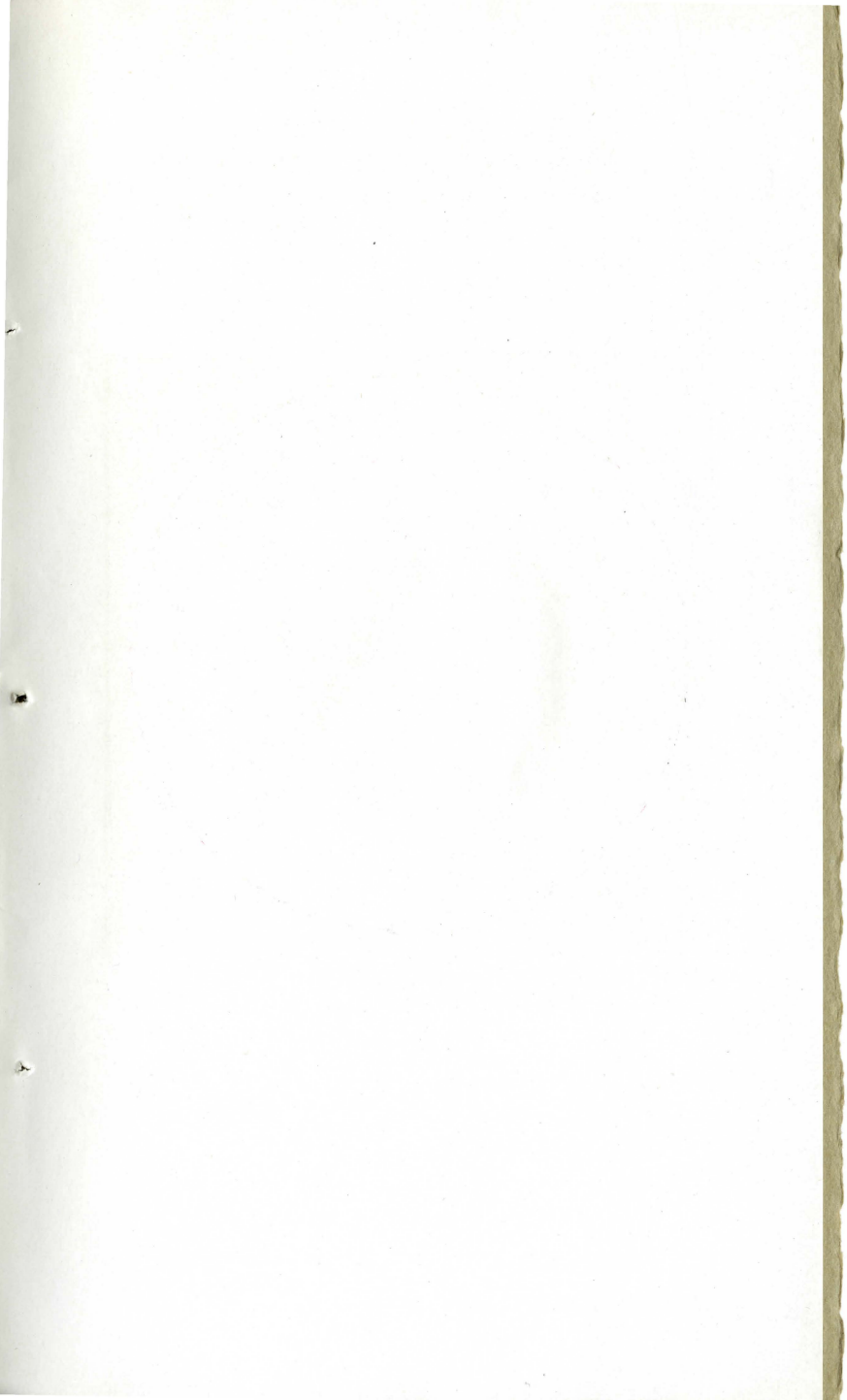


I. Normal Fundus (average tint)

(From Ball's "Modern Ophthalmology," Copyright, F. A. Davis Company, Publishers.)

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To the Members of the Medical Profession  
with the Compliments of the Manufacturers of  
**FELLOWS' COMPOUND SYRUP**  
*of* **HYPOPHOSPHITES**



## PREFACE

**T**HERE are certain important ocular conditions that should be promptly recognized and understood by the General Practitioner and by the Optometrist, as well as by the Oculist; and it is to recall and to describe briefly some of these conditions, and to explain their significance, that this brochure has been prepared. The Publishers therefore hope that it may be found of some slight use to that greater portion of the Medical Profession engaged in general practice.

THE FELLOWS MEDICAL MFG. CO., LTD.  
26 Christopher Street  
New York

## BIBLIOGRAPHY

Much of the information contained in the following pages has been gathered from the under-mentioned works, to the authors of which the compilers express their grateful acknowledgments.

DISEASES AND INJURIES OF THE EYE.....	<i>Sym</i>
TOXIC AMBLYOPIAS.....	<i>de Schweinitz</i>
MODERN OPHTHALMOLOGY.....	<i>Ball</i>
GOLDEN RULES OF OPHTHALMIC PRACTICE.....	<i>Hartridge</i>
MANUAL PRÁCTICO DE OFTALMOLOGÍA.....	<i>Michel</i>
INCIPIENT GLAUCOMA, ITS DIAGNOSIS AND TREATMENT	
	<i>A. Alison Bradburne, F.R.C.S.</i>

The plates of the fundus oculi are reproduced from Dr. James Moores Ball's "Modern Ophthalmology," third edition, through the courtesy of the Author and of the Publishers—the F. A. Davis Company, of Philadelphia.

**G**LAUCOMA is a rather common cause of blindness, and the slowly-progressing, insidious form is much more prevalent than the acute, fulminating variety.

Every examination of the eyes of adults should include a determination of the intra-ocular tension, especially if an eye be at all inflamed.

Testing the  
Intra-ocular  
Tension

Never put atropine or any other mydriatic into an eye without first estimating the tension of the globe, for, should glaucoma exist, atropine will make matters worse, and even precipitate an impending attack.

Use of  
Atropine

Be particularly careful with the use of atropine in the eyes of persons past middle life.

Glaucoma may exist even though the intra-ocular tension be relatively normal at the time of examination. Increased tension may recur with the reclining posture.

Variation of  
Intra-ocular  
Tension

Difficulty with reading glasses is quite sure to occur when glaucoma exists.

Presbyopia  
and  
Glaucoma

Remember that every untreated case of glaucoma ends in blindness.

Results

---

**D**O NOT MISTAKE glaucoma, iritis, keratitis, and foreign body of the cornea or conjunctiva for simple conjunctivitis. Important points in diagnosis are:

In *glaucoma* the injection or inflammation is accompanied by increased intra-ocular tension and usually by dilatation of the pupil;

Differential  
Diagnosis  
between  
Glaucoma,  
Iritis,  
Keratitis,  
Foreign  
Body  
and  
Conjunc-  
tivitis

In *iritis* the hyperæmia is sub-conjunctival and does not involve the conjunctiva of the lids; there is temporal or supra-orbital pain, and the normal lustre of the iris is dimmed; contraction of the pupil is the rule—unless routine treatment with atropine has already been begun;

**Keratitis** In *keratitis* the circum-corneal injection is accompanied by dullness and loss of transparency of the cornea; while,

**Foreign Bodies of the Cornea and Conjunctiva** *Foreign bodies* imbedded in the cornea or upon the conjunctiva produce extensive irritation, with photophobia and excessive lachrymation, and their presence is definitely shown by a direct inspection of the conjunctival surfaces of both the globe and the lids.

The cornea should be examined under oblique illumination by focusing artificial light upon it with a condensing (convex) lens.

**Conjunctivitis** *Acute conjunctivitis* is usually bilateral; the inflammation includes the lids; the iris is bright and unaffected, the cornea clear, and the subjective symptoms largely limited to photophobia, lachrymation, and to a scratching and burning sensation. In purulent conjunctivitis (gonorrhœal ophthalmia and "pink eye") the rapid progress, the early chemosis, and the swelling of the lids, together with the profuse purulent discharge, render a general diagnosis easy; whilst the differentiation between simple contagious ophthalmia and gonorrhœal ophthalmia is greatly facilitated by a consideration of the probable source of infection. Simple acute contagious conjunctivitis is so easily transmitted that the existence of other cases in the family or community is generally shown. Gonorrhœal ophthalmia in the adult is usually accompanied by urethritis in the individual; while ophthalmia in the newly-born will generally prove to be of the gonorrhœal variety.

*Note.*—"Pink-eye" is a self-limited disease which seldom results in injury to vision, while only prompt and energetic treatment will save eyes affected with gonorrhœal ophthalmia.

In all inflammations of the eye, observe the size of the pupil, the color and the lustre of the iris, and the reaction of the pupil to light, comparing, in each case, with the other eye, and remembering that, in an untreated, inflamed eye, a contracted pupil suggests iritis, and a dilated pupil, glaucoma.

The Iris and  
Pupil in  
Iritis  
and in  
Glaucoma

Early recognition of iritis is important in order that adhesion of the iris to the capsule of the lens may be prevented by the energetic use of atropine.

Synechia

Half the cases of iritis are syphilitic in character, while gonorrhœal infection is the next most frequent cause. Syphilitic iritis occurs as a late secondary manifestation.

Causes of  
Iritis

In locomotor ataxia the pupils are often small and react badly to light, though they respond well to accommodation and convergence (the Argyll-Robertson Sign).

Locomotor  
Ataxia

Phlyctenular conjunctivitis is the local manifestation of a systemic affection and requires general alterative and eliminative treatment, with a regulated diet. Delay of proper treatment leads to irreparable damage to the vision from corneal "pitting."

Phlycten-  
ular Kera-  
titis

General hot baths are useful adjuncts to the treatment of both phlyctenular and granular conjunctivitis.

Any loss of corneal tissue leaves a nebulous scar, or opacity, which, if at all central, will interfere seriously and permanently with the vision. If the loss is limited to the epithelium, perfect repair occurs.

Corneal  
Opacities

Never prescribe a lotion containing salts of lead for any affection of the cornea, as an oxide may be deposited and form a dense, permanent opacity.

Eyestrain     **V**ARIATION in the refraction of the two eyes is a most frequent cause of eyestrain.

Headache,  
etc.     Muscle imbalance is a common cause of headache and of other reflex neuroses. The vertical form is more common and more disturbing than is generally suspected.

Strabismus     Strabismus, if allowed to remain uncorrected, leads to blindness in the squinting eye.

Never submit a case of concomitant strabismus to operation without first determining the refractive condition of the eyes and fully correcting existing remediable defects with glasses.

Vision in  
Early Life     While a predisposition to myopia may be inherited, children are usually hyperopic at birth. Early visual tests may thus fail to register evidence of myopic processes already begun.

The Eyes of  
School  
Children     The eyes of children between the ages of 6 and 12 years should be examined annually for the prompt detection of myopia and of other refractive errors.

Exanthemata  
and the  
Eyesight     During the three months immediately following an attack of any of the exanthemata, the eyes should be carefully guarded and but little used for near work.

Visual  
Acuity  
and  
Intra-ocular  
Disease     "Standard vision" is not a certain indication of normal, healthy vision. Ability to read 20/20 does not exclude the existence of grave ocular disturbance. Optic neuritis, retinitis and choroiditis may exist with normal visual acuity and yet be unaccompanied by any subjective symptom.

Remember that vision may be occasionally very defective without any determinable ophthalmoscopic change. In such cases a test should be made for a color scotoma. A central color scotoma points to toxic amblyopia.

## TOXIC AMBLYOPIA AND RETROBULBAR NEURITIS.

The importance of early recognition of nerve af- Importance  
of Early  
Recognition  
fections of the eye and the prompt institution of  
rational methods for their relief need scarcely be  
urged. Tardy determination of cataract as a cause  
of declining eyesight need not, in view of our present  
methods of relieving this condition, prove prejudicial  
to the patient, but the same is not true of the nerve  
affections—amblyopia and retrobulbar neuritis. As  
it is frequently the general practitioner, or the op-  
tometrist, and not always the trained specialist, who  
is first consulted in cases of failing vision, attention  
is herein directed to certain important points in the  
diagnosis, as well as in the treatment, of these not  
uncommon nerve affections of the eye which demand  
prompt recognition and definite systemic treatment.

Toxic amblyopia occurs most frequently among Etiology  
persons in middle life who are regular users of to-  
bacco, and especially among habitual smokers. There  
is evidence to show that it may be occasioned by  
chewing tobacco, though it is found much less fre-  
quently among persons who chew but who do not  
smoke, than among those who smoke but who do not  
chew and those who both smoke and chew. It is sel-  
dom encountered among women. It is also occasion-  
ally observed as a symptom of chronic alcoholism, and  
the habitual use of alcohol as a beverage, if not in  
itself a direct cause of toxic amblyopia, is, at least,  
a predisposing factor in the etiology of tobacco  
amblyopia.

The symptoms are: A gradual failing of vision, Symptoms  
occurring in an almost equal degree in both eyes,  
without contraction of the field of vision or marked  
interference with the functions of the peripheral por-  
tions of the retina; the existence of a central color  
scotoma, and negative ophthalmoscopic features.

**Diagnosis** In toxic amblyopia, the amblyopia or "blindness" is not distributed over the whole field of vision, but is located in a small central area, extending from a little outside the central line of vision (visual axis) to the normal "blind spot," and is most marked for colors—particularly red and green. The defective area is oval in shape, with its long diameter horizontal, and corresponds to the external projection of that portion of the retina which lies between the optic nerve and the outer margin of the macula lutea, or that portion of the retina which is supplied by the papillo-macular bundle of optic nerve fibres. Within this area, form sense, as well as color sense, is defective. The patient is usually made aware of the deficiency of the former when attempting to read small print or when looking intently at small objects held close to the eye. Small objects project small images upon the retina and to see them distinctly they must be cast on the macula; large objects cast larger images and may be perceived by less sensitive portions of the retina. Since the color blindness is limited to a particular area, the patient is usually unaware of its existence. A large surface of red or of green, projected upon portions of the retina outside the scotoma, presents itself in its true color.

**Color Tests** This central scotoma for red and green is characteristic of toxic amblyopia and hence a feature of particular diagnostic importance. Its existence may be easily determined. One eye being covered, a narrow strip of red cardboard or paper, or of other bright red material, should be held in the hand so as to allow about half an inch square to protrude above the thumb and index finger, and quickly presented in the central line of vision of, and twelve or fifteen inches from, the uncovered eye. Keeping the vision fixed in the same direction, the square of red is now moved a couple of inches to the nasal side of the line of fixation, when it will be found, if a marked central scotoma exists, that the color is not recognized in the first position but is immediately recognized in the second. Should, by chance, the color be correctly named in the first position, it will be necessary

to repeat the test with green or with the same bit of red again. These patients seldom fail to name some color, and the possibility of guessing the right one, while not great, unless they have previously undergone a similar test, still exists. As the defect is most marked for red and green, only these colors need be employed, unless, as occasionally occurs, there should be a co-existing congenital red-green color blindness, when blue and yellow must be employed properly to carry out the test. A slightly pronounced central scotoma, with but little reduction of visual acuity, is rarely encountered. In such cases the color sense can be demonstrated with certainty by using more delicate shades of red and of green.

In progressive optic atrophy (retrobulbar neuritis) color perception for red and green may be lost early, but this is by no means general or limited to the central field, as in the toxic amblyopias. Then, too, in the former condition fundus changes are usually early apparent. Pale grey discoloration of the disc, occurring at first in patches among clear, shining streaks of lamina cribrosa; apparent contraction of the arteries and diminution in the volume of blood in the veins; and, later, general grey color of the disc, changing at length to bluish white, are regularly revealed by the ophthalmoscope as concomitant with the reduction of vision in retrobulbar neuritis. Optic Neuritis

Early color confusion in the central field is also occasionally encountered in the ocular disturbances resulting from chronic lead poisoning and similar occupational intoxications, but these affections belong, at least primarily, to a somewhat different category and are properly classed with diseases of the retina. Differentiation, moreover, is not difficult since, in addition to a history of exposure to absorption of the poison, such as lead by the painter, plumber and lead factory employee; carbon bisulphide by the worker in rubber; iodoform by the surgical patient, etc., and the presence of albumin in the urine, the fundus changes are quite characteristic. Other Intoxications Ophthalmoscopic

examination reveals an early active hyperæmia of the retina and, later, retinitis with hyaline degeneration of the vascular walls—just as in idiopathic retinitis albuminurica,—and sthenic papillitis. The later nerve changes are those of atrophy, with whitened disc and vascular impoverishment. (See Plate III).

**Treatment** Every oculist knows the rather unsatisfactory results commonly obtained in the treatment of toxic amblyopia and retrobulbar neuritis by the routine orthodox administration of iodides and strychnia. It has recently been shown that the internal administration of certain compounds of phosphorus and strychnine is much more efficacious in the relief of these conditions, and that a most satisfactory combination is presented in the Fellows' Compound Syrup of Hypophosphites—a preparation of available phosphorus with strychnia that for almost fifty years has enjoyed the confidence of physicians in all parts of the world as a nerve reconstructive and general tonic. This preparation should, in these cases, be taken in full doses (two teaspoonfuls three times a day, for an adult) for a considerable period of time.

In those cases with specific history or manifest luetic taint, iodide of potassium in increasing doses (15 to 75 grains daily) should be added to the treatment. Fellows' Syrup is best taken, mixed with a small quantity of water, just before the meals, and the iodide, in at least half a tumbler of water or milk, after the meals.

In toxic amblyopia, where one has to deal with the elimination of an established habit, as addiction to the use of tobacco and alcohol, Fellows' Syrup has a twofold value. Not only does it exercise a restorative action upon nerve efferents, but, through its effect upon nerve centers, greatly assists the sufferer to forego the use of the substance, or substances, the indulgence in which has been active in the production of the visual disturbance—an all-important factor to successful treatment.

# Fellows' Syrup of Hypophosphites

contains the chemically pure hypophosphites of potassium, manganese, calcium; together with iron, quinine and strychnine (each fluid drachm contains the equivalent of 1-64th of a grain of pure strychnine), agreeably blended in the form of a bland, stable, syrup with a slightly alkaline reaction.

For almost half a century its reputation has been constantly increasing, and it is to-day a favorite tonic prescription of leading physicians of every country in the world.

Its superiority to attempted imitations, of which there are a great number sold under the title of "Syr. Hypophos. Comp.," is generally acknowledged, since these preparations have been found lacking in uniformity and in other distinctive characteristics of the original.

---

## DOSES:

**ADULTS.** TONIC.—One teaspoonful at each meal, in a wineglassful of cold water.

**STIMULANT AND TONIC.**—Two teaspoonfuls at meal times, in two wineglassfuls of cold water.

**CHILDREN.** Regulate the dose according to age, viz: from 9 to 12, one-half; from 5 to 9, one-third; from 1 to 5, one-quarter of a teaspoonful.

*To secure the best results always dilute the Syrup with a wineglassful of cold water to each teaspoonful of Syrup.*

# Fellows' Laxative Tablets

(of Cascara Compound)

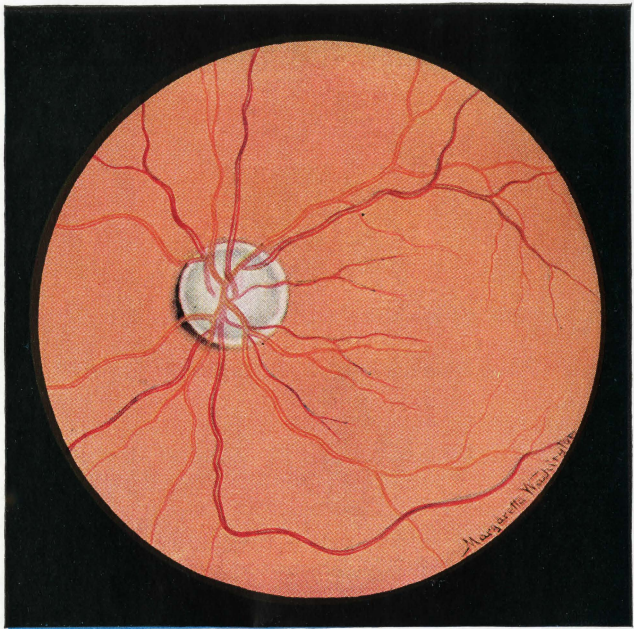
For the Relief of  
CONSTIPATION,  
BILIOUSNESS,  
INDIGESTION,  
SICK HEADACHES  
and HEPATIC  
INSUFFICIENCY

Small yellow, sugar-coated tablets of exceptional efficacy, conveniently supplied in original vials containing 40 and 100 tablets.

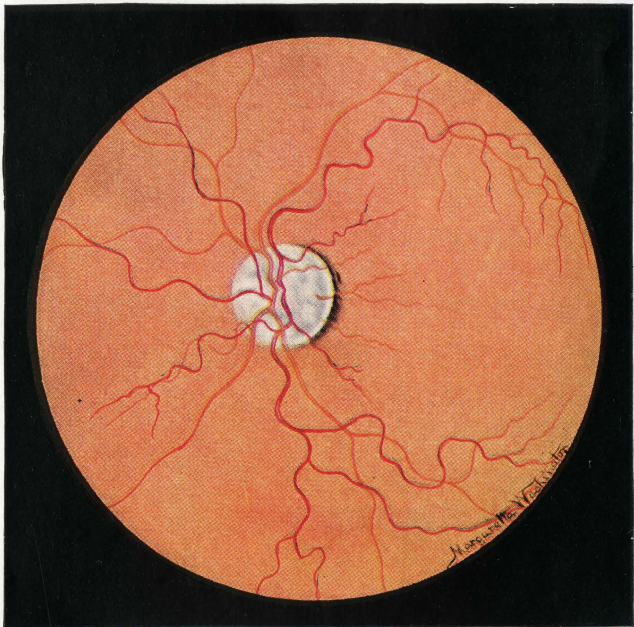
Contain neither strychnine nor belladonna, and constitute an ideal laxative for both expectant and nursing mothers.

Especially recommended when a laxative is required in conjunction with

FELLOWS' SYRUP



II. Primary Atrophy of the Optic Nerve



III. Secondary Atrophy of the Optic Nerve

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